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Self-defining Memories, Scripts, and the Life Story: Narrative Identity in Personality and Psychotherapy

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Running Head: Healthy Narrative Identity

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An integrative model of narrative identity builds on a *dual memory system* that draws on episodic memory and a longterm self to generate autobiographical memories. Autobiographical memories related to critical goals in a lifetime period lead to *life-story memories*, which in turn become *self-defining memories* when linked to an individual's enduring concerns. Self-defining memories that share repetitive emotion-outcome sequences yield *narrative scripts,* abstracted templates that filter cognitive-affective processing. The *life story* is the individual's overarching narrative that provides unity and purpose over the life course. Healthy narrative identity combines *memory specificity* with adaptive *meaning-making* to achieve insight and well-being, as demonstrated through a literature review of personality and clinical research, as well as new findings from our own research program. A clinical case study drawing on this narrative identity model is also presented with implications for treatment and research.

In 1986, the late Ted Sarbin declared that narrative might be considered the "root metaphor" of psychology (Sarbin, 1986). In selecting this phrase, he was drawing on Stephen Pepper's concept of a root metaphor as a "point of origin for a world hypothesis" (http://grammar.about.com/od/rs/g/rootmetaphorterm.htm). This idea, that the shaping of experience into a storied form might be a central way of understanding human psychology, has indeed taken root and flourished since Sarbin wrote these words. Researchers in cognitive science (Conway and Pleydell-Pearce, 2000; Conway, Singer, & Tagini, 2004), developmental psychology (Habermas & Bluck, 2000; McLean, 2008; McLean & Pasupathi, 2010), personality psychology (Bauer & McAdams, 2004; Lilgendahl & McAdams, 2011; McAdams, 1985; 1996), social psychology (Baumeister, Heatherton, & Stillwell, 2001; Langens & Schuler, 2005), and clinical psychology (Angus & Greenberg, 2011; Dimaggio & Semeraris, 2004; McLeod, 1997) have embraced the study of narrative. Because narrative units can extend from the brief account of a single episodic memory to the fully rendered account of an individual's life story, the scope of potential investigation into narrative dimensions of human thought and interaction is rather daunting.

However, within personality psychology, there have been efforts to rein in the study of narrative to focus on the topic of "narrative identity" (McAdams & Pals, 2006; McLean, 2008a, b; Singer, 2004) and its role in providing individuals with an overall sense of unity and purpose in their lives. In the last decade, there have been great advances in defining the key components, processes, functions, and content dimensions of narrative identity. As this progress has accumulated, personality and clinical psychologists interested in psychological health have begun to discern what differentiates the development and maintenance of healthy narrative identity from more problematic and dysfunctional forms. The definition of key factors in healthy

narrative identity translates into invaluable information for assessment and treatment of clients in psychotherapy.

A major goal of this article is to synthesize these advances in personality and clinical psychology into an overall framework of narrative identity that defines and orders its components. In highlighting the fundamental units of narrative identity, we call attention to two basic processes – the generation of specific imagistic memories (**memory specificity)** and the companion process of linking recollected experiences to the conceptual structures of the self (**meaning-making**). We propose that a flexible combination of these two narrative processes is a key to psychological health and well-being (Singer & Conway, 2011). A second goal of this article is to document how these concepts and processes linked to narrative identity research are now emerging in clinical studies of psychological disorders. Finally, we offer a case example that shows how this integrated narrative identity framework can be directly relevant to the practice of psychotherapy.

Building Narrative Identity from the Ground Up

In this section we present the building blocks of narrative identity. Specifically, we bring together autobiographical memories, narrative scripts, and life stories as the three key components of narrative identity within a given individual. In an earlier special issue of this journal, Singer (2004) identified points of convergence for an emerging group of narrative identity researchers, who shared the perspective that the generation of narratives from lived experience was the central activity of identity formation. These researchers were also increasingly embracing cognitive science models that suggested links among self-schemas, goals, and the retention and retrieval of autobiographical memories. By tracing linkages between memory and self-structures, these researchers connected the narrative processing of experience

to “autobiographical reasoning” (Habermas & Bluck, 2000). The creation and refinement of narrative identity was considered a lifespan developmental project, never complete and always contextually responding to the challenges and tasks posed by each stage of the life cycle. Finally, these researchers were clear in their vision that any given narrative identity is born out of a sociocultural matrix that limits and influences the themes, imagery, plotlines, and characters that serve as the raw material for its construction.

Guided by these general principles, we now propose a more precise and integrated model of narrative identity (See Figure 1). Narrative identity consists of a dual memory system that generates autobiographical memories, some of which, because of their relevance to long-term goals and enduring conflicts, evolve into self-defining memories. Convergences among self-defining memories lead to the creation of narrative scripts that schematize repetitive action-outcome-emotional response sequences. Both self-defining memories and narrative scripts serve as the ingredients for an overall life story that, with time, grows in complexity as it adds “chapters” across the lifespan. One can think of the pool of self-defining memories and scripts as possessing a *synchronic* existence within narrative identity; they accumulate associations and connections, while remaining relatively static in the personality. One can think of the life story as *diachronic* – it moves forward in time and continually amends itself in light of new experiences. Let us take each of these concepts in turn.

Insert Figure 1 about here

The Dual Memory System

Drawing on the self-memory system model (Conway & Pleydell-Pearce, 2000), Conway

and Singer proposed a dual memory system that generates autobiographical memories and the subtype most relevant to narrative identity - "self-defining memories" (Conway, Singer, & Tagini, 2004; Singer & Conway, 2011) (See Figure 2).

Insert Figure 2 about here

The self-memory system model postulates a "working self" that is task-driven and focused on short-term goals. It exchanges information with an *episodic memory system* that operates largely out of awareness and produces sensory-perceptual-affective reconstructions of past experience. These transitory memory images are available for use by the working self for possible integration into the *long-term self*.

The long-term self consists of two components relevant to the development of autobiographical memories – the *autobiographical knowledge base* and the *conceptual self*. The autobiographical knowledge base is a hierarchical structure that stores past experience at differing levels of abstraction. At its lowest level are general event categories (e.g., times I have gone bicycling, my best restaurant experiences, learning to drive). The next level consists of larger periods that form significant segments of the life story (e.g., my first years in my job, the early years of my marriage, my father's illness). Finally, a well-developed autobiographical knowledge hierarchy possesses at the highest level of organization the life-story schema of one's life in entirety (e.g., my career as a physician, my life in my community, my role as a spouse). Within each of these slots, one can search for and retrieve more summarized or specific

autobiographical memories that may be linked to more specific memory images from the episodic memory system (Conway, 2008, 2009).

The other component of the long-term self, the *conceptual self* consists of non-temporally specified conceptual self-structures, such as narrative scripts (which we discuss later), possible selves (Markus & Nurius, 1986), self-with-other units (Ogilivie & Rose, 1995), internal working models (Bowlby, 1969/1982, 1973, 1980), attitudes, self-attributed traits, values, and beliefs, among other semantic self-constructs. These abstract categories of the self can exist without specific grounding in autobiographical knowledge units or episodic memories (Klein & Loftus, 1993; Klein, Loftus, & Kihlstrom, 1996), but in general they do share links with summary and/or specific memories. For example, a woman who holds an image of herself as highly independent in relationships may have a general memory of breaking up with a series of men during college and a specific memory of a particular time when she told her boyfriend that she was unwilling to shift her graduate school plans in order to move with him to the city where his new job would be.

In general, episodic memories that are slotted effectively in the autobiographical knowledge base and that share connections to the conceptual self are likely to be the most deeply processed and central to ongoing concerns of the personality. These enduring autobiographical memories are the nuclei of narrative identity. Once these memories have been slotted into the autobiographical knowledge base, they achieve a degree of permanence within our long-term memory storage and become available as retrievable autobiographical memories.

Pasupathi has called this linking of remembered experiences to the long-term self, "self-event connections" (Pasupathi & Mansour, 2006; Pasupathi, Mansour, & Brubaker, 2007; Pasupathi & Wainryb, 2010). She highlights the developmental and cultural contexts that shape how certain features of life events are made salient by the larger societal values we internalize

from family and community. The study of cultural contexts reveals the process through which parents, and in particular mothers, "scaffold" narrative structures and encourage the elaboration of particular narrative themes as children begin to construct and recall memories in conversation (Fivush, Hayden, & Reese, 2006; Nelson & Fivush, 2004; Harley & Reese, 1999; Reese & Fivush, 1993). Pasupathi notes, for example, that as we form concepts of "possible selves," images of the achieving self or the self in relationship are highlighted by our Western culture, leading us to attend more to elements relevant to those themes in our episodic memories. In contrast, Asian parents may be more likely to emphasize the larger social implications or morals to be extracted from the experience, leading to fewer self-event connections and less individualized connections to societal values (Wang & Conway, 2004).

In memory narratives from adolescents and adults, Pasupathi detailed different forms of self-event relations that may contribute to the construction of narrative identity (Pasupathi et al., 2007; Pasupathi & Mansour, 2006). First, *no-connections* are narrative memories with no explicit connection to the self. Although a connection to the self may be implicit, it is fair to suggest that a number of these memories are likely to be transient and do not occupy a central position in the autobiographical knowledge base. *Explain/illustrate* relations are memory narratives of events that serve to highlight and reinforce characteristics of the individual's personality. Contrasting, but still focused on stability, are *dismissal* relations, or memory narratives that highlight an unusual or anomalous experience and emphasize how this event is uncharacteristic of the person.

In Pasupathi's taxonomy, self-event relations can also reflect moments of personal change or "turning points" (McAdams, 1982). The *cause* relation is a connection between memory and self whereby the event led to an insight or new course of action. The *reveal* relation,

which Pasupathi found to be rare, is a memory narrative about an event that illuminated an already existing but heretofore unacknowledged aspect of the self (e.g., a woman viewing a film about marital conflict realizing for the first time the deep regrets she has been harboring about her own marriage).

Assuming that enduring connections of stability (*explain*, *dismissal*) or change (*cause*, *reveal*) are achieved, we may then consider the next component of the narrative identity framework.

Life-story Memories

If memories are related to sufficiently important self-dimensions salient in a particular life period of an individual, then they may meet the threshold of what Thomsen and her colleagues (Thomsen & Berntsen, 2008, 2009; Thomsen et al., in press) call *life-story memories*. Life-story memories are linked to long-term goal pursuits, and they are more affectively intense, important, well-rehearsed and detailed than other less significant autobiographical memories.

Thomsen et al. (in press) asked 61 students to write and rate life events weekly during the semester. Three months after the semester ended, participants received an unanticipated request to recall three memories that were important to their life story. Three memories of low importance were picked randomly as controls. As predicted, compared to the control memories, the life-story memories had received higher ratings on emotional intensity, goal relevance, importance, and rehearsal; they were also more accurately dated. Interestingly, their content was not more consistently recalled, suggesting that memory distortion in the service of personality concerns was more likely to take place in these more emotionally-invested memories.

Given life-story memories' links to the important life concerns of certain periods in people's lives, one might ask whether these memories will endure and become part of lasting

life-story narratives, such that they become central and recurring touchstones of narrative identity. To do so, the fledgling life-story memories must transition from being merely important enough to be revived over a few months time to becoming linked to a significant life-story "chapter." If they connect to the most critical and organizing themes of individuals' narratives, then they cross the threshold to be considered self-definitional, not only of a segment of the person's story, but of the life story as a whole.

Self-Defining Memories

These iconic memories within narrative identity have been operationalized as **self-defining memories** and have been the subject of multiple studies over the last 20 years (e.g., Blagov & Singer, 2004; McLean & Pasupathi, 2006; McLean & Thorne, 2003; Moffitt & Singer, 1994; Singer & Moffitt, 1991-92; Singer & Salovey, 1993; Sutin & Robins, 2005; Sutin & Stockdale, 2011; Thorne, McLean, & Lawrence, 2004; Sutherland & Bryant, 2005; Jobson & O'Kearney, 2008; Wood & Conway, 2006). Similar to life-story memories, self-defining memories are vivid, affectively intense, and well-rehearsed. They build on life-story memories by connecting to other significant memories across lifetime periods that share their themes and narrative sequences. They reflect individuals' most enduring concerns (e.g., achievement, intimacy, spirituality) and/or unresolved conflicts (e.g., sibling rivalry, ambivalence about a parental figure, addictive tendencies).

For example, a male client in couples therapy that had chronic struggles with self-acceptance and defensiveness recalled the following self-defining memory,

> My father and I had just arrived for the summer in Rhode Island and we had brought down a ladder on top of the station wagon to work on the house. I took it down with my father, but then ran to the beach to look for my friends. When I was down at the water, a

> neighbor came and found me and told me that I better go back to the cottage, my father had fallen. I went back and the ambulance was on the way. My father was lying at the foot of the ladder, unconscious and not responsive. The paramedics showed up and got him off to the hospital. He had had a stroke. We did not know this at first and we thought he had injured himself falling off the ladder. My mother blamed me for not being there to spot him. I felt horrible. Even though we learned soon after that he had had the stroke first and then stumbled to the ground, nothing more was said. She never apologized for wrongly blaming me for his collapse. (Singer & Labunko Messier, 2011, p. 231).

In the ensuing sessions it became clear that this memory was an exemplar for this client of many other memories that reflected a similar theme of being misunderstood and wrongly accused. Some related memories were earlier than this example and others quite recent, but this memory occupied a central place in his self-understanding and his view of his most intimate relationships.

In a recent article, Singer and Bonalume (2010) demonstrated how researchers and clinicians might extract self-defining memories from psychotherapy protocols and identify repetitive narrative sequences that link to central themes and conflicts in the client's history. Drawing on an extensive clinical assessment of a 19- year-old female client presenting with depression and anxiety, the researchers used their *Coding System for Autobiographical Memory Narratives in Psychotherapy (CS-AMNP)* to identify 24 memory narratives for evaluation of self-defining features across the memories. Further analysis revealed a repetitive narrative sequence in 12 of the 24 memories that followed a pattern in which the main protagonist of the memory (either the client or her mother) experienced a real or imagined social rejection and responded with withdrawal from social contact and engagement in an isolative activity (e.g., television-watching, fantasy, substance use). Singer and Bonalume proposed that this recurring narrative

sequence should be considered a *narrative script* and that it formed a critical cognitive-affective mode of processing interpersonal interactions for this client.

Narrative Scripts

Narrative scripts were first defined in Tomkins's script theory of personality (Tomkins, 1979, 1987). Tomkins argued that the basic cognitive-affective unit of personality was the "scene," which consists of at least one affect and the object of that affect. Scenes that contain similar objects and affective response can become linked through a process of "psychological magnification." Repetitive linking of associated scenes results in the development of a "script." The script is defined as "an individual's rules for predicting, interpreting, responding to, and controlling a magnified set of scenes" (Tomkins, 1979, p. 217).

Beyond clinicians and personality researchers' tracking of scripts in case studies (Carlson, 1981; Schultz, 2002; Singer & Baddeley, & Frantsve, 2008), Demorest has developed systematic methods of operationalizing and measuring scripts in the laboratory (Demorest, 1995, 2008, this issue; Demorest & Alexander, 1992; Demorest, Crits-Christoph, Hatch, & Luborsky, 1999; Demorest, Popovska, & Dabova, 2012; Siegel & Demorest, 2010). Most recently, Demorest and colleagues (2012) asked 47 college students to recall 10 memories of emotional importance. Using a previously developed taxonomy of events and emotions (i.e., *scenes*; Demorest, 2008), raters coded each memory for one of 60 event-emotion compounds (12 events x 5 emotions); the largest number of repeated compounds across a participant's memories was considered his or her narrative script. For example, if four out of 10 memories repeated the scene "accomplishment-joy," then the participant was classified as possessing an accomplishment-joy script. One month later, participants completed a reaction-time task, asking them to identify which emotion might be most likely to be evoked by each of the 12 events. Participants were

unaware that their responses were being timed. The hypothesis was that individuals would respond faster to the events for which they evidenced scripts in Part 1 of the study. Not only did participants have faster responses to events that matched their scripts, they also named the specific emotion they had previously associated with that event 78% of the time.

In research on actual clinical case transcripts, Siegel and Demorest (2010) demonstrated the power of scripts to influence how individuals reconstruct past experiences and potentially interpret new ones. Using a coding system called FRAMES (Fundamental Repetitive and Maladaptive Emotion Structure; Dahl & Teller, 1994; Hoelzer & Dahl, 1996; Siegel, Sammons, & Dahl, 2002), they extracted narrative sequences from archived transcripts of a long-term psychotherapy and coded them for standardized categories of interpersonal exchange. The categories consisted of wishes, satisfaction or dissatisfaction states *vis-a-vis* wishes, and an activity-passivity dimension. (For example, a positive active wish – to help someone – or a negative active wish – to shame someone – could lead respectively to the positive passive state of gratitude or the negative passive state of humiliation.) The narrative sequences can be coded from the client's narratives or exchanges between client and therapist. In the case reported, five maladaptive scripts recurred in hundreds of the client's narratives and exchanges with the therapist. In a second part to the study, the frequency of these scripts evidenced a statistically significant decline over time, as the frequency of more adaptive narrative sequence outcomes increased. The transformation of the narrative scripts was seen as an indicator of the treatment's success, verified by other empirical indices in this particular case study (Jones & Windholz, 1990).

Having established memories and scripts as the building blocks of narrative identity, we turn to its largest unit, which captures the diachronic movement across time and developmental periods - the life story.

The Life Story

Since the mid-1980s, McAdams (1985) has built an impressive body of theoretical and empirical work on the premise that identity is the evolving narrative we construct about our life. In proposing the *life-story* theory of identity he argues that, in adolescence, individuals reach a degree of cognitive and social maturity (Erikson, 1963; Habermas & Bluck, 2000) that enables them to cast themselves as protagonists in an unfolding life narrative that draws on a variety of cultural influences (including parental and community values, media, literature, myth, and religion). In advanced Western societies, most people's life story coalesces around a shifting balance between two dominant themes of relationships (communion) and autonomy (agency), or what Freud summed up as "love and work." These themes play out in repetitive archetypal characters (e.g., demanding father or nurturing mother figures) that inhabit a given life story, as well as in the most salient episodes that are highlighted as its touchstones or turning points. In addition, life stories can be evaluated for their relative emphasis on personal and social *generativity.* McAdams has demonstrated that more generative life stories are associated with more optimism, greater well-being, better physical health, and greater capacity for positive personal growth and change (McAdams & de St. Aubin, 1992; McAdams, Logan, & de St. Aubin, 1993).

Adler (this issue) applied the life-story theory to narratives about the course of psychotherapy, demonstrating that individuals who show better therapy outcomes emphasize the development of enhanced agency over the course of treatment. Using growth-curve modeling, he

has also tracked the sequence of improvement in psychotherapy, finding that narratives of increased agency preceded reports of enhanced psychological health, suggesting that the stories that we construct may help determine well-being.

Across all levels of narrative identity (both memories and the life story), the ability to craft coherent narratives appears to rely on certain cognitive and sociocultural competencies that emerge by late adolescence (Habermas & Bluck, 2000). Drawing on discourse analysis research based in both cognitive science (Graesser, Mills, & Zwaan, 1997) and qualitative narrative analysis (Fiese, et al. 1999), Habermas and Bluck suggested the properties of *temporal*, *causal*, and *thematic* coherence, as well as the *cultural concept of biography.* Temporal coherence in Western cultures is the capacity for individuals to establish a linear chronological sequence for the events that have occurred in their lives. To possess causal coherence is to explain behavior in terms of external events and/or internal attributes – e.g., an adolescent is able to explain a child's academic struggles as a function of poverty or in another circumstance as a function of a learning disability. Thematic coherence entails the capacity to detect the presence of unifying themes or metaphors across experiences,(e.g., "life is unfair;" "hard work is the route to success;" "things always tend to work out."). The cultural concept of biography includes normative events (and their timing), such as childhood milestones, partner relationships, and life-cycle events (e.g., children are initiated into adulthood by older members of the group; rituals of mating usually follow initiation; aging is accompanied by an eventual slowing down of activity).

Habermas and Bluck (2000) proposed that deficits in life-story coherence, as uncovered in clinical assessment, might have unique links to psychological disorders. For example, people with history of trauma or addiction evidence fragmented temporal coherence (Langer, 1993; Singer, 1997). Attachment insecurity is also linked to fragmentation and mis-applied causal

coherence – e.g., "If I were thinner, I would be loved more" (Conway et al., 2004; Main, 1991). Both temporal and causal coherence appear to be compromised in some individuals suffering from schizophrenia (Raffard et al., 2010).

Connecting the Narrative Identity Framework to Psychological Health

In the preceding sections we synthesized a large body of narrative identity research from diverse sub-disciplines, including cognitive, developmental, personality, and clinical psychology. Integrating this work has highlighted a narrative process that starts with memory consolidation and proceeds through various forms of schematization, a process that allows for mechanisms of both stability and change within the self and identity. In elaborating the dual memory system, we emphasized that one aspect of healthy narrative identity is the capacity to link the self to vivid "experience-near" accounts of lived events (episodic memory) and the equally important capacity to step back and draw more "experience-distant" meaning from these encounters (self-event connections). Although the two memory systems are not in opposition to each other, relying too heavily or exclusively on either system is likely to be disadvantageous for individuals (Conway, Singer, & Tagini, 2004). Summarizing a rich body of psychoanalytic theory and contemporary neuroscientific research, Singer and Conway (2011) concluded,

> …When we integrate episodic memories that register the sights, smells, and sounds of the world with…our long-term self that draws on the power of our abstracting and symbolizing capacity for metaphor and logic, we create a synthesis that does justice to the intricacy of both the living world and the psychological one inside us (Singer & Conway, 2011, p. 1203).

To connect these ideas to the extant narrative identity literature, we refer to the capacity to invoke imagistic detailed memories as **memory specificity** and the capacity to connect these

memories to self-structures within the long-term self, as **meaning-making**.

Memory Specificity

We operationalize **memory specificity** as the recall of a unique set of events confined to a single episode within a 24-hour period (Singer & Blagov, 2002). Whether about pleasure or pain, specific memories are textured and affectively evocative reconstructions of past experience. Individuals who score higher on a measure of defensiveness are less likely to recall specific memories, regardless of their emotional valence (Blagov & Singer, 2004).

In our research we have been concerned with individuals' ability to summon specific self-defining memories that might support their ongoing goal pursuits or mood-regulation (Blagov & Singer, 2004; Josephson, Singer, & Salovey, 1996; Singer, Rexhaj, & Baddeley, 2007). A difficulty in activating specific autobiographical memories could lead to maladaptive functioning in that it leaves the person less able to benefit from the cognitive-affective information available through vivid and detailed memories. The re-experiencing of a vivid memory can provide cognitive information about the probability of a desired goal outcome, while at the same time reminding the individual of what the affective experience of that outcome would be like. In a related manner, one can use the affective quality of the memory to maintain a positive mood or repair a negative one (Josephson, Singer, & Salovey, 1996).

Memory Specificity and Psychological Disorders

A wealth of research points to a relationship between memory specificity deficits and psychological disorders. A few key findings from McKay, Singer, and Conway's review (in press) are worth noting here. In discussing the research on autobiographical memory specificity and emotional disorders, Williams et al. (2007) highlighted the connection between depression and overgeneral memory: Depressed individuals show longer latencies in retrieving specific

memories, and they recall fewer such memories. This deficit has been linked to impaired social-problem solving (Raes, Hermans, Williams, Demyttenaere, et al., 2005) and delayed recuperation from depressive episodes (Dalgleish et al., 2007). Patients with a history of major depression are likely to manifest overgeneral memory even outside of a current depressive episode. As individuals' tendencies toward overgeneral recall increase, so does their vulnerability to future depressive episodes (Anderson, Goddard, & Powell, 2010).

Reduced memory specificity has also been linked to bipolar disorder (Mandell & Lam, 2004; Scott, Stanton, Garland & Ferrier, 2000), schizophrenia (Neumann, Blairy, Lecompte, & Phillipot, 2007; Warrren & Halsam, 2007), autism spectrum disorders (Crane & Goddard, 2008), posttraumatic stress disorder (Harvey, Bryant, & Dang, 1998; McNally, Lasko, Macklin, & Pitman, 1995), and borderline personality disorder (Reid & Startup, 2010).

Williams et al. (2007) hypothesized that the common thread in the overgeneral memory-psychopathology connection is a defensive strategy learned in response to trauma and emotional threat. Because much of episodic retrieval is a top-down spread of activation from more general to more specific levels of the autobiographical memory hierarchy, emotionally avoidant individuals are prone to learn to "short-circuit" retrieval at a higher, more general level of the hierarchy in order to block painful recollections. As this avoidance strategy becomes habitual, it increasingly prevents effective searching and retrieval of specific memories. In support of this idea, a study of individuals with schizophrenia found a link between the degree of suicidality and the number of specific memories, implying that patients who were in less acute distress were employing a more defensive memory strategy (Taylor, Gooding, Wood, & Tarrier, 2010).

Meaning-Making

For healthy functioning, the capacity for memory specificity should also be accompanied by the capacity to connect the memory narrative to adaptive self-structures in the long-term self. In other words, individuals will be effective at goal pursuits and navigating life challenges when they can generate informative self-event connections as described above – when they employ memories, scripts, and the life story to *explain*, *reveal*, or *cause change* in the self. At each level of narrative identity (memories, scripts, and the life story), researchers have often found that the capacity for **meaning-making** in response to narrated experience is generally predictive of psychological health, well-being and capacity for growth. However, a major caveat is that the meanings extracted from experience need to be *coherent* (i.e., sensible rather than fragmented), *flexible* (i.e., capable of revision in light of new information), and *accurate* (e.g., neither too self-critical nor too grandiose). Much of the foundations of cognitive-behavioral therapy are premised on exploring faulty over-generalized meanings and attributions made by individuals experiencing chronic distress or dysfunction in their lives.

McLean and Thorne's (2003) work on meaning-making in self-defining memories distinguished self-event connections that involved specific behavioral prescriptions (lessons learned) from self-event connections that offered understanding (insight). Blagov and Singer (2004) reported that individuals with the highest number of explicit meaning-making statements in their self-defining memories also showed the most favorable scores on a personality adjustment inventory. In young adults, higher levels of meaning-making coded from turning-point narratives were associated with greater identity status maturity, whereas lower levels of meaning-making were linked to identity foreclosure and diffusion (McLean & Pratt, 2006). Meaning-making was also associated with optimism and generativity.

Similar findings regarding meaning-making and psychological adjustment have emerged in research with life-story narratives (e.g., Bauer & McAdams, 2004; Bauer, McAdams, & Sakaeda, 2005; Pals, 2006). Bauer, McAdams and Pals (2008) have linked the ability to find meanings of positive growth and transformation in life-story narratives to higher levels of "eudaimonic" well-being (a combination of happiness with higher levels of ego development). Lilgendahl and McAdams (2011) found that, in life stories from a national sample of mid-life adults, "positive processing" (extracting overall positive value from experiences) was correlated negatively with neuroticism and positively with well-being. "Differentiated processing" (finding instances of personal growth in negative experiences) was correlated positively with openness and well-being.

With regard to meaning-making and narrative scripts, the idea that redemption scripts are linked to well-being and personal growth has received the most research attention. Tomkins (1987) defined "limitation-remediation" as a type of script whereby the positive to negative affect ratio reflects the eventual dominance of positive over negative affect by the story's end. In contrast, contamination scripts entail the ultimate prevalence of negative affect, despite the person's best efforts to counteract this trend. Building on this idea, McAdams, Diamond, de St. Aubin, and Mansfield (1997) identified *redemption* (bad scenes that move to good outcomes) and *contamination* (good scenes that end poorly) sequences in the life stories of highly generative adults. Generativity was correlated positively with the number of redemption and negatively with the number of contamination sequences. These findings were replicated in adults and college students in analyses of memory narratives as well as broader life-story episodes; and the results were extended to a strong relationship between redemption sequences and well-being (McAdams, Lewis, Patten, & Bowman, 2001). Subsequent research has further replicated the

link between redemption and psychological health. For example, McLean and Breen (2009) demonstrated a link between redemption scenes and self-esteem in the turning point memory narratives of adolescent boys. In a representative national adult sample, Adler and Poulin (2009) found a positive link between redemption and well-being and a negative link between contamination and distress in the written accounts of responses to the 9/11 attacks.

Along the lines of this last finding, researchers are increasingly charting how negative lessons, such as contamination sequences or internalized self-criticisms, drawn from narrative memories, may be linked to less optimal functioning. McLean, Wood, and Breen (under review) examined a sample of adolescents with a history of delinquent behavior and did not find an association between meaning-making in SDMs and desistance. Instead, when examining the adolescents' attributions about their memories, they noticed strong tendencies in some participants to draw negative inferences about themselves or others. Lilgendahl, McLean, and Mansfield (in press) found that individuals who subscribed to a view of personality as fixed or unchanging were more likely to make self-attributions about being "bad" when describing memories of past transgressions.

Meaning-Making and Psychological Disorders

Given these varied connections between psychological health and meaning-making in the memories, scripts, and life stories that underlie narrative identity, what evidence exists linking individual differences in meaning-making to psychological disorders? Drawing on our recent review (McKay, Singer, & Conway, in press), we summarize it as follows.

In cluster-analyzing variables that might differentiate participants with and without depression, Harkness's (2011) study of self-defining memories found that depressed status was linked to contamination sequences and negative affect, whereas non-depressed status was linked

to meaning-making and redemption sequences. Contamination and meaning-making were the best predictors of self-report depression scores in a regression analysis.

A thematic analysis of the memories of patients with bipolar disorder revealed difficulties in constructing coherent meanings from experiences as well as a sense of discontinuity and fragmentation (Inder et al., 2008). Similar evidence for disconnection and alienation in the memories of people with bipolar disorder has emerged in at least one other study (Raymond, Lam, & Singer, 2011).

Patients with schizophrenia (relative to a healthy control group) showed fewer self-event connections in memories, and their self-defining memories were less coherent and less elaborated (Raffard et al., 2010, see also Raffard et al., 2009). Negative symptoms were negatively linked to meaning-making in memories. Furthermore, lower levels of self-event connections and meaning-making were present in both the illness-related and the general self-defining memories of people with schizophrenia, relative to controls (Berna et al., 2011). In an encouraging vein, patients who were in active treatment actually reported a higher number of redemption themes than did control participants. Perhaps the pursuit of help for mental illness was linked to internalization of a more hopeful outcome in the patients' memories.

In considering other Axis I disorders, adults with autism-spectrum disorder displayed fewer SDMs that contain meaning-making when compared to controls (Crane, Goddard, & Pring, 2009). Individuals with posttraumatic stress disorder (PTSD) have tended to identify their traumatic experiences as turning-point memories, and the tendency to do this has been associated with more severe PTSD symptoms (Berntsen & Rubin, 2006; Berntsen & Rubin, 2007). Such findings again emphasize that not all meanings derived from memory necessarily points to positive mental health.

Meaning-making may also differ in the self-defining memories of individuals who suffered loss and also met criteria for complicated grief (CG), when compared to people whose loss was not linked to CG (Maccaullum & Bryant, 2008). Both groups reported the loss of a loved one as a self-defining memory, but people with CG reported a larger number of self-defining memories related to the person who died. Importantly, the self-defining memories of people without CG contained some redemption sequences, whereas not a single person with CG expressed a redemption sequence in his or her memories of loss.

To examine the continuum from adaptive functioning to psychopathology in relation to self-defining memories in our own laboratory, we recently collected 10 self-defining memories from a sample of 120 undergraduate participants at a Northwestern liberal arts college (*M age* = 19.8, *SD* = 1.36, 78% female and 73% Caucasian/White) (Blagov, Singer, Oost, & McKay, 2012). The SDMs were coded for specificity (specific vs. summary) and meaning (integrative vs. non-integrative; see Blagov & Singer, 2004; Singer & Blagov, 2002).

To capture a wide spectrum of personality characteristics, we put together a battery of rational-empirical personality and personality pathology measures that ranged in the extent to which they index normal traits (the NEO Five-factor Inventory; Costa & McCrae, 1992), clinical variants of normal traits (the Weinberger Adjustment Inventory – Short Form; Weinberger, 1997), and personality pathology dimensions (the Schedule of Nonadaptive and Adaptive Personality; Clark, 1993). After deriving scores from these instruments' scales, we subjected the data to factor analysis with an oblique rotation and extracted three personality superfactors, Constraint, Positive Affectivity, and Negative Affectivity, which were consistent with Tellegen's (1985) triarchic model of superordinate traits.

Greater levels of meaning-making in the SDMs were linked to the personality superfactors, Constraint (r =.17, p =.037) and Positive Affectivity (r = .31, p = .001), which are predictive of greater psychological health and adjustment. The number of specific memories was positively linked to Constraint (r = .24, p = .007), whereas lower numbers of specific positive memories were linked to Negative Affectivity (r = -.21, p = .013), consistent with research linking reduced positive memory specificity to difficulties in the regulation of negative emotion, as observed in depression, PTSD, and borderline personality disorder. Although no clear correlations emerged for redemption sequences, Negative Affectivity was linked to contamination (r = .20, p = .02).

These results and the other studies of SDM and psychological disorders point to a beginning convergence across the personality and clinical literatures and suggest how we may begin to develop a model of narrative identity, highlighting memory specificity and meaning-making, that is relevant to a formal assessment of psychological disorder. In the final section of this article, we describe the direct application of our model of narrative identity to the practice of psychotherapy.

A Case Example of Narrative Identity in Psychotherapy

The following case demonstrates how therapists can access the components of narrative identity in the treatment of a client with significant relational difficulties. William (name changed) is a 45-year old divorced heterosexual White man who was treated in outpatient psychotherapy by the first author. His presenting problem was the recent ending of his second marriage because of his wife's discovery of his extra-marital affair. This most recent affair fit a pattern of infidelity that William saw as ruining all of his efforts at sustained intimate relationships throughout his life.

William announced in his initial session, “I have a terrible memory. My family even teases me about this.” Over several subsequent sessions he reminded the therapist that he is horrible at remembering specific incidents and dates from his life. He spoke in general terms about his parents’ bitter divorce when he was in early grade school and his sister’s death from cancer when she was 17 and he was 15.

In examining his series of infidelities, he traced a pattern of avoidance and compartmentalizing of his feelings with regard to the consequences of his actions. In many spheres of his life, both in his relationships and work, the therapy slowly uncovered a *narrative script*, or what emotion-focused therapists, Angus and Greenberg (2011) would call the “same old story” - a repetitive sequence of helplessness and fear in one domain of his life, followed by risky self-destructive behavior in another, and then a failure to connect the feeling and the behaviors from the separate domains. For William to gain more control over his actions, it seemed necessary to achieve more effective integration of his thoughts, feelings, and actions.

With regard to the components of his narrative identity, he needed somehow to invoke greater specificity of memory and then to connect more insightful meaning to his previous actions in order to break the pattern of his destructive script, which repeatedly led to poor choices in his intimate relationships and conflicts in his work relationships. To achieve this end, the therapist initiated emotion-focused techniques involving imagery that allowed William to connect bodily sensations to current emotions and thoughts. William and the therapist worked on developing a metaphor or what Angus and Greenberg (2011) would call an “emotional handle” that would be a signal to him to stay “in the moment” instead of avoiding his feelings. William used the concept of a “red flag” and visualized this image when he began to notice that he was emotionally distancing himself from an experience or memory. The therapeutic goal was to

achieve better fluidity in his recollected experience among what Angus and Greenberg refer to as three modes of thoughts - external mode (basic facts – what happened?) to the reflexive mode (what does it mean?) to the internal mode (how do I feel?) (Angus & Greenberg, 2011, p. 51).

As he learned to practice the imagery exercises (see also J. L. Singer, 2005) and employ his "red flag" warning signal, he began to notice greater memory specificity and more capacity to connect meaning to these experiences. In one session, he returned to the theme of his parents' angry conflicts. He then described a powerful memory, first questioning whether it was a story told to him by his mother, but then recognizing that it would be unlikely his mother would have discussed the event with him. As he talked, he recovered more detail of the episode, which involved his father returning to their home after his mother had kicked him out. His father came in through the window, tied his mother to a chair, and put a pair of scissors to her throat. Given that his father was subsequently revealed to have had ties to violent crime, this incident is unlikely to be a confabulation. In recovering the specificity of this memory, William eventually made several meaningful links in his larger life story between his own pattern of fear/helplessness in facing his father (as well as in response to his sister's death) and his own efforts to "conquer and subdue" a variety of women.

The process of bringing to light a series of specific and emotionally evocative memories, despite some of their painful implications, was helpful to William in the sense that he gained more insight into and control over his dissociative and compartmentalizing defense in his relationships. As the therapy continued, he was able to summon up his "red flag" signal in numerous interpersonal encounters in order to revive specific memories that alerted him to the potential consequences of risky and potentially damaging behavior.

Conclusion

The emergence of narrative identity in personality psychology has raised both opportunities and challenges for researchers and clinical psychologists. McAdams's (1995; McAdams & Pals, 2006) three level framework of personality placed narrative identity at Level 3 in conjunction with traits at Level 1 and self-regulatory mechanisms at Level 2. Trait psychologists (Widiger, this issue) and self-regulation researchers (Strauman, this issue) are far more advanced than narrative identity researchers in the process of consolidating their models and creating translational research that allows for rigorous application to clinical assessment and psychotherapy practice. This article has sought to present a more systematic framework of the key components of narrative identity within a given individual. For simplicity, and in order to keep its focus on the individual personality, it has neglected other vital areas of narrative research, including the role of memory-telling, listener-response, and contextual constraints, factors encompassed by what McLean, Pasupathi and Pals (2007) call "situated stories." Instead, it has placed an emphasis on enduring and more stable features of narrative identity, seeking to define its most central components and the relations among these components. The result is a more circumscribed definition of narrative identity that highlights autobiographical memories, scripts, and life stories, while placing in the foreground a dual memory system that combines imagistic reconstructions of past experience (memory specificity) with the capacity for abstraction and autobiographical reasoning (meaning-making). We acknowledge that this conception of narrative identity is simplified and skeletal in many ways, but we offer it as framework that can be refined and modified in the service of translational research.

Drawing on this framework of narrative identity, we have attempted to show its relevance to the clinical assessment of psychological disorder and to interventions that target narrative

identity in psychotherapy. As the case study presented suggests, healthy narrative identity entails a capacity to narrate and draw meaning from emotionally evocative memories, while gaining freedom from narrative scripts that lead one in self-damaging directions. Accompanying cognitive-behavioral changes produce revisions in the internalized life story, enhancing agency and redemptive possibilities. This article documents new research methods for coding both self-defining memories and narrative scripts from psychotherapy transcripts, opening up opportunities for more systematic translation of laboratory-based narrative constructs into measurable clinical variables.

There is a long road to travel ahead, but if narrative identity research is to have a lasting impact on the field of clinical psychology, the preliminary efforts toward integration offered in this paper (or efforts like them) are essential. We proposed the present framework as an initial step in what we see as a long and productive alliance. Clinical psychologists work on a daily basis with memories, repetitive scripts, and life stories of their clients. They strive with their most empathic efforts to connect to the emotional imagery of their clients' memories and to assist them in extracting meaning from these recollections. The increasing convergence in narrative identity research on basic processes of memory and autobiographical reasoning raises the possibility that clinicians might draw on these recent advances to assist them in their work.

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Figure 1 – Model of Narrative Identity

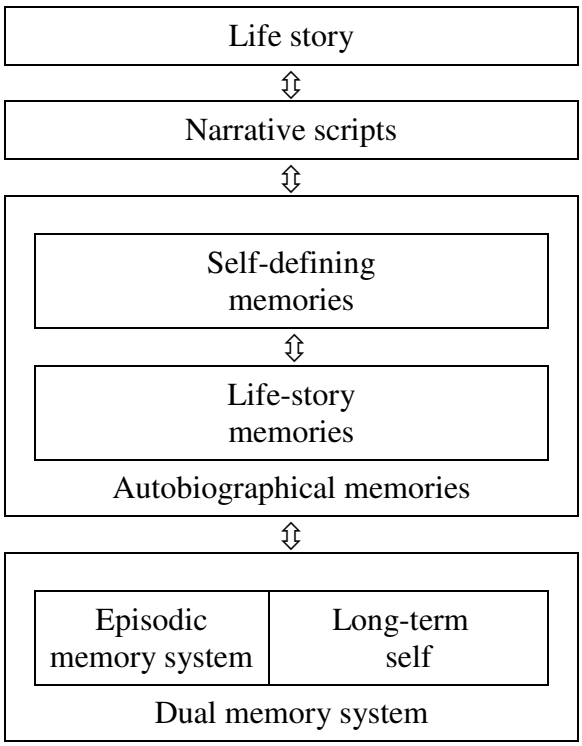
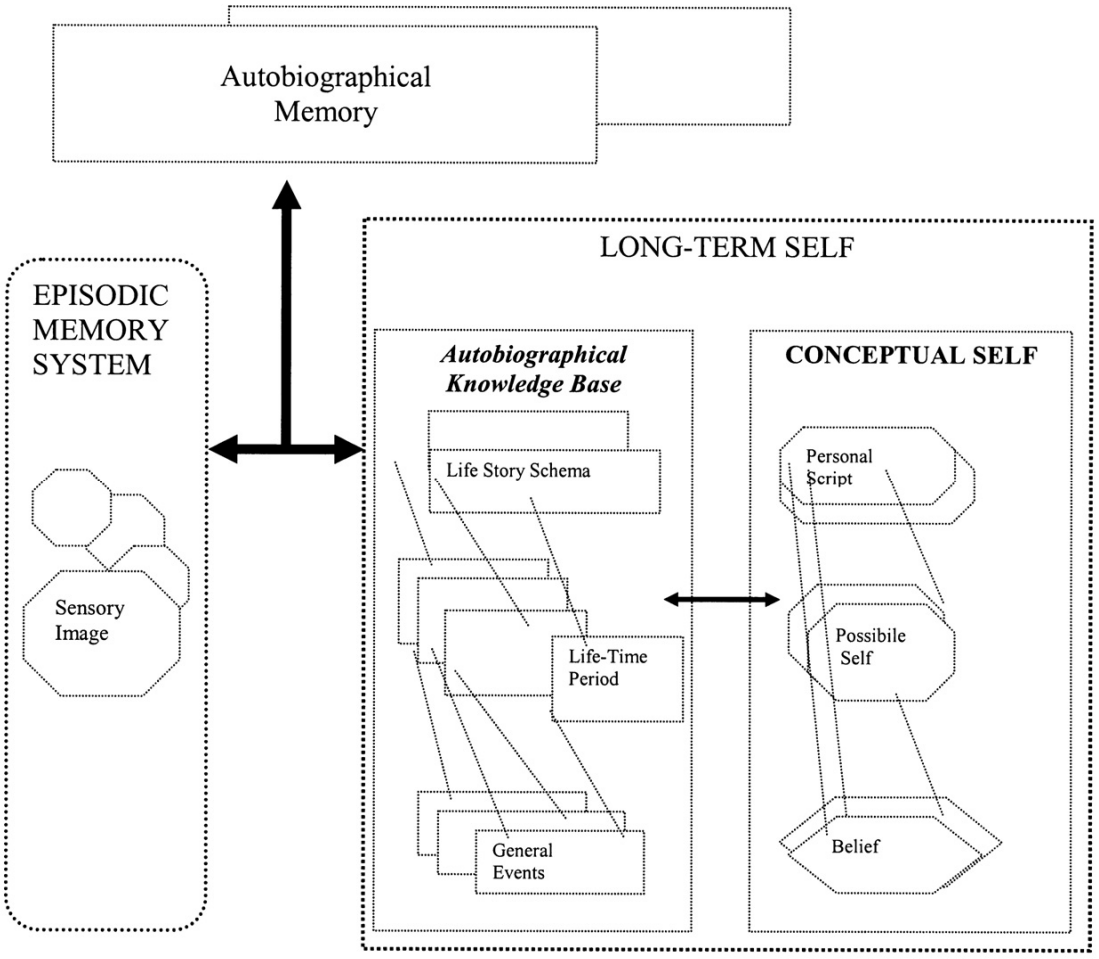

Life story
Narrative scripts
Self-defining memories
Life-story memories
Autobiographical memories
Episodic memory system
Long-term self
Dual memory system

Figure 2 – The Dual Memory System: Reprinted with Permission from Conway, M.A., Singer, J. A.,& Tagini, A. (2004). The self and autobiographical memory: correspondence and coherence. *Social Cognition, 22,* 491-529. (p., 498).


Autobiographical Memory
LONG-TERM SELF
EPISODIC MEMORY SYSTEM
Sensory Image
Autobiographical Knowledge Base
Life Story Schema
Life-Time Period
General Events
CONCEPTUAL SELF
Personal Script
Possibile Self
Belief